



# THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

Re-accredited (2<sup>nd</sup> Cycle) by NAAC with Grade "A", CGPA – 3.46 on a 4-point scale

## Backlog Arrear Examination, March 2021

BCH 3632

Plant Biochemistry

Max Marks: 75

Time: 3 Hrs.

### PART A

I. Answer any Five questions each not exceeding 4 pages:

(5 x 15 = 75)

1. Describe the mechanism of stomata opening and closing with neat diagram.
2. Discuss the Non - cyclic photo phosphorylation in plants with neat schematic representation.
3. Elaborate on the sources and functions of plant hormones.
4. Describe the microbial flora, development of root nodules and the biochemistry of Biological nitrogen fixation in plants with a neat schematic diagram.
5. Define Secondary metabolites. Illustrate the shikimic acid pathway of synthesis of secondary metabolites.
6. Describe the Melvin - Calvin cycle with neat diagram.
7. Give short notes on the classification of terpenoids.